Title:
Nursing Facility Staff Education to Decrease Hospital Readmissions Due to Sepsis: A Pilot Test

Abigail Lee Eby, BSN, RN
College of Nursing, Alvernia University, Reading, PA, USA

ACCEPTED

Session Title:
Rising Stars of Research and Scholarship Invited Student Posters

Slot:
RS PST1: Sunday, 17 November 2019: 11:45 AM-12:15 PM

Applicable Category:
Clinical, Students, Leaders, Researchers

Keywords:
Sepsis, Sepsis education and Sepsis readmission

References:


Abstract Summary:

Sepsis readmissions have a great financial and personal consequence for those who have survived sepsis. Sepsis survivors often require more assistance and often need post-acute care in nursing facilities. Nursing facilities were the target of an educational intervention to decrease hospital admissions and readmissions for sepsis.

Content Outline:

1. Introduction
   A. These guidelines define sepsis as a “life-threatening organ dysfunction caused by a dysregulated host response to infection” (Rhodes et al., 2017, p 486).
   B. The purpose of this study will examine hospital readmissions in several nursing facilities that are preferred partners with Wellspan Health. In particular, readmission rates will be compared before and after completing nursing facility staff education on sepsis.

2. Body
   A. Literature Review
      1. Sepsis is the leading contributor to excess healthcare cost due to readmissions when compared to congestive heart failure and myocardial infarction (Chang et al., 2015).
      2. Sepsis has the highest mean length of stay and cost associated with readmissions (Mayr et al., 2017).
      3. Readmission after sepsis is more likely to result in death or transition to hospice care (Jones et al., 2015).
   B. Methods
      1. The nursing staff which includes, Registered Nurses, Licensed Practical Nurses, Medication Technicians and Certified Nursing Assistants, will undergo an education session that will not last more than one hour. During this session the nursing staff will learn about sepsis and the use of the STOP and WATCH tool and sepsis algorithm. Their knowledge will be measured by a pre-and post-test.
      2. Sepsis admission and readmission rates before and after the nursing staff education, will be measured by a retrospective record review.
   C. Limitations
1. Lack of support from nursing facilities
2. Nursing facilities not providing the requested equipment to complete the education
3. Study limited to one local area hospital and 6 skilled nursing facilities

D. Results
1. Educational Intervention
   1. Mean pre-test score was 78.7% and the mean post test score was 95.6%
   2. Two sample t-test showed this to be a statistically significant change in knowledge after
      the education was completed
2. Chart Reviews
   1. Compare pre-intervention and post-intervention admission and readmission rates
   2. Compare pre-intervention and post-intervention death rates

3. Conclusion
1. Skilled nursing staff education improved staff knowledge about sepsis
2. This will compare the results from the pre-intervention and post-intervention retrospective
   chart review.

Topic Selection:
Rising Stars of Research and Scholarship Invited Student Posters (25201)

Abstract Text:

Background and Review of Literature: Sepsis readmissions have a great financial and personal
consequence for those who have survived sepsis. By knowing that sepsis survivors often require more
assistance and often need post-acute care in nursing facilities, nursing facilities should be the focus of a
targeted educational intervention to decrease hospital readmissions. Lippitt’s Change theory supports
providing education to a wide range of care providers in contact with sepsis survivors.

Purpose: The purpose of this study is to decrease sepsis readmissions and sepsis admissions by
increasing knowledge of nursing facility direct care staff.

Methods: The design for this project, will be based on nursing staff education. The nursing staff
education will be completed at nursing facilities in Eastern Lancaster County, Pennsylvania that use
Wellspan Ephrata Internal Medicine providers to care for their patients. The nursing staff which
includes, Registered Nurses, Licensed Practical Nurses, Medication Technicians and Certified Nursing
Assistants, will undergo an education session that will not last more than one hour.

Implementation Plan/Procedure: During this session the nursing staff will learn about sepsis and the
use of the STOP and WATCH tools and sepsis algorithm. Their knowledge will be measured by a pre- and
post-test. Sepsis admission and readmission rates before and after the nursing staff education, will be measured by a retrospective record review for those that meet the inclusion criteria.

**Implications/Conclusion:** Sepsis continues to increase healthcare costs nationwide. Nursing facilities contain a vulnerable population that have an increased risk of having an infection turn into sepsis. Education and tools to help nursing home caregivers to identify those at risk of sepsis and teaching them the necessary steps to take to help those patients, will give those patients a higher chance of surviving. Identifying sepsis early will help to not only prevent sepsis but may also help prevent sepsis readmissions. Decreasing sepsis readmissions will decrease the cost of care and will help patients to have a better quality of life. The use of a simple sepsis tool, along with education will allow for early detection and give those patients a better chance of survival.

**Keywords:** Sepsis survivors, sepsis follow up care, sepsis discharge, sepsis readmission, sepsis discharge planning, sepsis primary care provider, sepsis primary care, sepsis mortality, sepsis education